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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/578,167	05/24/2000	Paul Entwistle	00279	4629

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EXAMINER	
HOYE, MICHAEL W	
ART UNIT	**PAPER NUMBER**
2614	

DATE MAILED: 07/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/578,167	ENTWISTLE, PAUL	
	Examiner	Art Unit	
	Michael W. Hoye	2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 March 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *1-13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *24 May 2000* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see page 6 of the Remarks, filed on March 7, 2005, with respect to the rejection of claims 1 and 9 under 35 U.S.C. § 112, first paragraph, have been fully considered and are persuasive. The rejection of claims 1 and 9 under 35 U.S.C. § 112, first paragraph, has been withdrawn.

2. Applicant's arguments filed on March 7, 2005, with respect to the rejection of claims 1 through 13 under 35 U.S.C. § 103(a) have been fully considered but they are not persuasive.

As to independent claims 1 and 9, the Applicant argues on pages 6-7 of the Remarks section that, "...while the receiver in Blatter can process data transport streams from two different sources, these transport streams are never processed and merged simultaneously by the receiver... As such, Blatter does not teach to combining selected data packets from a plurality of data streams to form a single data stream, wherein only the PIDs relating to the selected data packets are remapped prior to multiplexing."

Also, on page 8, the Applicant similarly argues that, "Blatter provides no teaching to how multiple transport streams can be combined together simultaneously to form a single data stream."

In response to the Applicant's argument that the references fail to show certain features of the Applicant's invention, it is noted that the features upon which the Applicant relies (i.e., the transport streams are never processed and merged **simultaneously** by the receiver) are not

recited in the rejected claims. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In addition to, after further consideration of the amended claim language of claim 1, which states, "...selecting packets of data from said streams and only remapping the packet identifiers corresponding to said selected data packets of each stream using the local database," does not mean that other processing may not occur. The broadest reasonable interpretation of the claim language merely means that packets of data from the plurality of transport streams are selected and packet identifiers (PIDs) corresponding to the selected packets of data are remapped. Therefore, the Blatter reference still reads on the claim language as stated above, where the data packets of the program that the user selected to view or store are identified by their PIDs and those selected PIDs may be renumbered or remapped using other PID allocation schemes that avoid potential PID ambiguity (col. 4, lines 23-67 and col. 8, lines 4-48). The Magee et al reference was highlighted by the Examiner to provide additional teaching regarding PID remapping from multiple transport streams to a single transport stream. Furthermore, similar remarks apply to independent claim 9 as described above for claim 1.

The Applicant admits on the bottom of page 6 that, "the receiver in Blatter can process data transport streams from two different sources,' but argues on page 7 of the Remarks section that, "Blatter only teaches formation and condensing of PSI from a single data stream to create a single data stream."

In response, the Examiner respectfully disagrees with the Applicant's argument because Blatter teaches in numerous places that multiple streams may be received and a single data

stream may be created (see col. 3, lines 24-60 and col. 8, lines 4-48 for example, also see col. 10, lines 45-47 and col. 17, lines 5-13).

The Applicant argues on the bottom of page 8 that, "Blatter provides no teaching...to the problem of the present invention of preventing identifier clashes between packets of data from different transport streams."

In response, the Examiner respectfully disagrees. To begin with, the Applicant admitted on page 8 in the 2nd paragraph that, "Blatter acknowledges at col. 8, lines 40-44 that alternate re-mapping schemes such as changing the base value of PID remapping for each set of program components is known." In addition to, as described above by the Examiner, the Magee et al reference was provided to include additional teaching regarding PID remapping from multiple transport streams to a single transport stream.

Regarding the Applicant's argument on the bottom of page 8 that, "Blatter provides no teaching...to the solution of the present invention of only remapping the PIDs corresponding to the selected data packets under the local control of the receiver to prevent such clashes," the Examiner respectfully disagrees with the Applicant for the reasons described above as specifically directed toward the current language of claims 1 and 9.

Regarding the Magee et al reference, the Applicant argues on page 9 that, "Magee is typically found at a headend of [a] broadcast system and not at a receiver end...and Magee provides no teaching to remapping PID data only of selected data packets under the local control of the receiver as in the present invention."

In response, the Examiner notes that the claim language of claim 1 simply claims, "a broadcast data receiver apparatus", and claim 9 claims in line 5, "...receiving...in local data base

storage in a receiver." The claims do not explicitly describe a set-top box or receiver end type of system. In addition, a headend typically receives multiple transport streams of data from broadcast transmissions or other means. Furthermore, the Magee et al reference was highlighted by the Examiner to provide additional teaching regarding PID remapping from multiple transport streams to a single transport stream as described above and in the rejection below, while the Blatter et al was used as the base reference which discloses a system located at a receiver end.

The Applicant argues on page 10 that, "Event if the teachings in Blatter and Magee were combined, both documents teach to manipulating other data in the data stream in addition to the PIDs which uses signification processing speed and memory..."

In response, the Examiner respectfully reiterates the remarks made above regarding the language of claim 1 and 9, where the currently amended claim language does exclude other processing from occurring in addition to the remapping of the selected PIDs.

Claim Objections

3. Claim 1 is objected to because of the following informalities: there appear to be multiple informal insufficient antecedent basis for limitations in the claim as noted below:

- the limitation "said data stream" in line 5 should be --of said plurality of data transport streams--.
- the limitation "said data packets" in line 6 should be --said packets of data--.
- the limitation "said streams" occurring twice in line 10 should be --said plurality of data transport streams--.

- the limitation "said selected data packets" in line 11 should be --said selected packets of data--.
- the limitation "said transport streams" in line 13 should be --said plurality of data transport streams--.
- Claims 2-13 should be checked and corrected for similar insufficient antecedent basis for limitations in the claims

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blatter et al (USPN 5,754,651), in view of Magee et al (USPN 5,835,493), both cited by the applicant.

As to claim 1, note the Blatter et al reference which discloses a broadcast data receiver apparatus. The claimed receiving and processing data from a number of received data transport streams is met by transport system 25 shown in Fig. 1, which receives data steams from antenna 10 (col. 3, lines 24-26 & 38-39), as well as storage device 90, and storage medium 105. The claimed data broadcast from a remote location is met by the data received by antenna 10 in Fig. 1. The claimed storage means for storing a local database in said receiver is met by storage PID selection 47 in Fig. 1. The claimed each of said plurality of data transport streams including packets of data and packet identifiers for identifying said packets of data is met by the packets

and packet identifiers or PIDs (see col. 4, lines 23-32). The claimed processing means processing a single stream of data is met by transport decoder 55 in Fig. 1, which further includes elements 45 and 47. The claimed means for receiving data transport streams and for processing and demultiplexing said plurality of data transport streams is met by the input processor 15, the demodulator 20, the decoder 30, wherein demultiplexing is inherently performed, and by the decode PID selection 45 and the storage PID selection. The claimed selecting packets of data from said plurality of data transport streams and only remapping the packet identifiers corresponding to said selected packets of data of each steam using the local database, the selected packets of data and the remapped packet identifiers from said plurality of data transport streams then being multiplexed into a single transport steam of data is met by Units 45 and 47 in Fig. 1 as well as control signal C and multiplexer (mux) 37 in Fig. 1 (col. 4, lines 23-67, also see col. 8, lines 4-54), where the data packets of the program that the user selected to view or store are identified by their PIDs and those selected PIDs may be renumbered or remapped using other PID allocation schemes that avoid potential PID ambiguity. The Magee et al reference provides additional teaching regarding PID remapping from multiple transport streams to a single transport stream. The Magee et al reference discloses a receiver apparatus that receives multiple data transport streams in the DLM's 110 in Fig. 2 (col. 12, lines 24-25), where the transport steams received are clearly remapped (col. 12, lines 7-16) and selected portions of data from the transfer steams are multiplexed into a single transport stream (col. 7, lines 46-48; col. 8, lines 1-8; and col. 9, line 64 – col. 10, line 5). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the broadcast data receiver apparatus of Blatter et al with the transport steam remultiplexer

apparatus of Magee et al for the advantage of receiving multiple separate data transport streams wherein each stream is demultiplexed, remapped, and selected portions of data are multiplexed into a single transport stream. One of ordinary skill in the art would have been led to make such a modification since selecting portions of data from transport streams and multiplexing the data into a single transport stream is well known in the art, especially, in the art of remultiplexers.

As to claim 2, the Blatter et al reference discloses the claimed broadcast data receiver apparatus wherein the transport streams of data are received from both a remote broadcast location as met by the antenna 10 as shown in Fig. 1, and data storage means connected to or incorporated in the receiver as met by the storage device 90 and storage medium 105 as shown in Fig. 1.

As to claim 3, the Blatter et al reference discloses the claimed broadcast receiver apparatus wherein said single transport stream of data generated by the multiplexing steps includes selected packets of data from the data transport steams of data received as described in col. 4, lines 23-56.

As to claim 4, the Blatter et al reference discloses the claimed broadcast data receiver apparatus wherein said packets of data are selected automatically as they represent data that is required for the said broadcast data receiver apparatus operate in response to user selections as described in col. 4, lines 23-56, where a user selects the content or programs he wishes to view (lines 32-33), and the system controller 115 uses the selection information to configure the system to select the data packets identified and using control signal C, which is sent to the multiplexer 37 for selecting the proper transport steam.

As to claim 5, the Blatter et al reference discloses the claimed broadcast data receiver apparatus wherein the selected data that is multiplexed into a single stream is stored or recorded in accordance with the operating parameters for the receiver apparatus as described in col. 4, lines 32-56, where the selected data or programs are stored according to the operating parameters selected by the user.

As to claim 6, the Blatter et al reference discloses the claimed broadcast data receiver apparatus wherein the data processing means are integrated circuits (see col. 16, lines 54-58, where the functions of the elements of Fig.1 may be implemented in whole or in part by a micro processor, which is inherently an integrated circuit), which accept one data input stream as shown by the single data stream output by the multiplexer 37 that is sent to elements 45 and 47 in Fig. 1.

As to claim 7, the Blatter et al reference discloses the claimed broadcast data receiver apparatus wherein the single transport data stream is presented to single data stream input components in the receiver as shown by the single data stream output by the multiplexer 37 that is sent to elements 45 and 47 in Fig. 1, which allow the data to be used to perform a designated function such as ultimately displaying the data or storing the data (col. 4, lines 59-65).

As to claim 8, the Blatter et al reference discloses the claimed broadcast data receiver apparatus wherein the designated function is selected from the generation of video displays (col. 4, lines 32-33), the recording of programs (col. 4, lines 32-34), the playback of programs (col. 4, line 45), the generation of electronic program guides (col. 16, lines 58-61) or on-screen menu selection (col. 4, lines 32-35), linking with Internet services and other apparatus (col. 3, lines 30-37).

As to claim 9, note the Blatter et al reference which discloses a method for the generation of a single stream of data. The claimed generation of a single stream of data for subsequent processing, from received multiple transport streams of data is met by the multiplexer 37 (Fig. 1) receiving multiple transport streams of data and generating a single output stream of data. The claimed step of receiving a plurality of transport streams of data, each containing packets of data and packet identifiers in local database storage in a receiver is met by transport system 25, that includes PIDs (col. 4, lines 23-29) as shown in Fig. 1, which receives data steams from antenna 10 (col. 3, lines 24-26 & 38-39), storage device 90, and storage medium 105. The claimed processing and demultiplexing said streams of data is met by the input processor 15, the demodulator 20, the decoder 30, wherein demultiplexing is inherently performed, and by the decode PID selection 45 and the storage PID selection, which are all part of the local receiver as shown in Fig. 1, as well as, Units 45 and 47 (see col. 4, lines 23-67, also see col. 8, lines 17-54). The claimed selecting packets of data from said plurality of streams, re-mapping only the packet identifiers within the selected packets of data using the local database is met by a user selection through the use of the remote control unit 125, which causes the receiver apparatus system controller 115 to send control signal C and select signal paths through the use of multiplexer (mux) 37 in Fig. 1, the remapping also uses Units 45 and 47 (see col. 4, lines 23-67, also see col. 8, lines 17-54), where the data packets of the program that the user selected to view or store are identified by their PIDs and those selected PIDs may be renumbered or remapped using other PID allocation schemes that avoid potential PID ambiguity, and the claimed and multiplexing the selected packets of data from said plurality of transport steams into a single stream of data is met by Units 45 and 47 in Fig. 1, as well as control signal C and multiplexer (mux) 37 in Fig. 1 (col.

4, lines 23-67, also see col. 8, lines 17-54). The Magee et al reference provides additional teaching regarding PID remapping from multiple transport streams to a single transport stream. The Magee et al reference discloses a method for receiving multiple data transport streams in the DLM's 110 in Fig. 2 (col. 12, lines 24-25), where the transport steams received are remapped (col. 12, lines 7-16) and selected portions of data from the transfer steams are multiplexed into a single transport stream (col. 7, lines 46-48; col. 8, lines 1-8; and col. 9, line 64 – col. 10, line 5). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the method of Blatter et al for the generation of a single stream of data for subsequent processing with the transport steam remultiplexer method of Magee et al for the advantage of receiving multiple separate data transport streams wherein each stream is demultiplexed, remapped, and selected portions of data are multiplexed into a single transport stream. One of ordinary skill in the art would have been led to make such a modification since selecting portions of data from transport streams and multiplexing the data into a single transport stream is well known in the art, especially, in the art of remultiplexers.

As to claim 10, the Blatter et al reference discloses the claimed method wherein at least one of the transport streams of data is broadcast data received from a remote location containing audio, video, and auxiliary services data is met by the antenna 10 as shown in Fig. 1 which receives transport streams of data containing audio, video, and/or other communications data (see col. 3, lines 24-40).

As to claim 11, the Blatter et al reference discloses the claimed method wherein demultiplexing of the received data from each transport stream is performed in accordance with the data and identified by the receiver to identify the packets of data as described by the transport

stream contains Program Specific Information (PSI) that is identified by the receiver and used for identifying Packet Identifiers (PIDs) which identify the packets of data (col. 4, lines 23-56).

As to claim 12, the Blatter et al reference discloses the claimed method wherein the re-mapping of the data packets identifier takes place under control of the receiver to allow the required data to be multiplexed into a single stream and avoid identifier clashes between packets of data from different program streams as described in col. 8, lines 17-47 (specifically, lines 40-47), also see col. 4, lines 23-47.

As to claim 13, the Blatter et al reference discloses the claimed method wherein the locally controlled re-mapping of the PIDs allows the origin of the data to be subsequently identified in subsequent processing the same by the inherency of using PID allocation schemes that avoid potential PID ambiguity which allows the origin of the data to be maintained (col. 8, lines 17-54).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael W. Hoye whose telephone number is **571-272-7346**. The examiner can normally be reached on Monday to Friday from 8:30 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller, can be reached at **571-272-7353**.

Any response to this action should be mailed to:

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On July 15, 2005, the Central FAX Number will change to 571-273-8300.

Hand-delivered responses should be brought to the Customer Service Window at the address listed above.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to customer service whose telephone number is **571-272-2600**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see **http://pair-direct.uspto.gov**. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at **866-217-9197** (toll-free).

Michael W. Hoye
July 11, 2005

JOHN MILLER
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